

# Proposed Timeline for Development of a WTC Signature

Prepared by Signature Subgroup  
of WTC Expert Technical Review Panel

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# Working definition of WTC Signature

WTC Signature: A set of analyzable materials, elements, or chemical compounds, which individually or in combination, provide adequate evidence of contamination from World Trade Center dust and/or combustion products at concentrations determined to be of significance.

# Develop guidelines for participating research labs

Establish requirements for identifying qualified labs/personnel for each analytical task. Establish guidelines for analytical reporting and public disclosure.

Target: June 04

Identify and arrange for participating  
labs:

SEM/TEM

XRF

Organics

Target: August 04

Compile list of archived samples and  
results:

EPA, OSHA, USGS, USPHS, NYU,  
NYC, NIEHS data base, other??

Provide a list of archived samples that could be  
reanalyzed for specific signature components and  
COPCs. Provide results of previously analyzed samples  
that may impact the development of a WTC signature.

Target: July 04

# Establish sampling subgroup?

- Identify sampling methods and establish protocols. Identify and reconcile conflicts between established sampling methods and analytical requirements. Analytical labs to provide sampling media requirements.
- Examples: How to properly sample HVAC systems *for signature components*, are microvac or other types of samples required?, where to collect wipe samples, who will do the sampling, what qualifications are required, what types of QA/QC are required.

Target: June 04

# Begin analysis of archived background and contaminated samples

Identify possible background interferences and candidate signature components. Also begin analysis of COPCs to develop quantitative relationships between signature components and COPCs.

Target: immediately after authorizing of laboratories

Develop requirements for sampling:  
Sample media  
Techniques  
Other?

Sampling techniques for standard  
methods may not be adequate for the  
purposes of this study.

Target: Aug, 04?



# Interim report on robustness of proposed signature components

Report to Panel on identified strengths and weaknesses of proposed signature components as determined from analysis of background and contaminated samples.

Target: 1-2 months after authorization of laboratories

# Begin collection and analysis of "typical" test samples

Test signature components in "typical" samples. Further evaluate relationship between signature components and COPCs. Determine relative proportions of signature components with distance and direction.

Target: 2-3 months after authorization of laboratories

# Define detection limits for signature components

Target: 3-4 months after authorization of laboratories

# Establish analysis flow chart

Determine analysis order and stopping rules. Determine proper order for multiple technique analysis of single samples.

Target: 3-4 months after authorization of laboratories

# Final report on success of WTC signature development

Target: Spring 05?

# Determine analytical benchmarks

Target: Spring 05?

# Peer Review

Target: Spring 05?